

PLATE III.

- Fig. 25. *Urolabes Glæocapsarum*, n. sp., female, 1-54th of an inch long : *a*, anterior portion ; *b*, caudal portion ; *c, c*, buccal dilatation and œsophagus ; *d*, muscular sheath of the latter ; *e*, point of union of œsophagus with intestine ; *f*, intestine ; *g*, hepatic organ ; *h*, rectum ; *i*, anus. The male is the same as the female, with the exception of the tail being a little shorter, and the addition of the penis.
- Fig. 26. *Urolabes labiata*, n. sp., female, 1-40th of an inch long : *a*, anterior portion, the head bearing two papillæ ; *b*, caudal portion ; *c*, apparatus apparently connected with the exsertion and retraction of the œsophagus (seen also in figs. 25 and 27). The other parts having been indicated in fig. 25, will not require repetition.
- Fig. 27. *Urolabes tentaculata*, n. sp., female, 1-23rd of an inch long : *a*, anterior portion, the head bearing two tentaculiform prolongations ; *b*, caudal portion.
- Fig. 28. *Urolabes cirrata*, n. sp., female, 1-73rd of an inch long : *a*, anterior portion, the head bearing two short linear cirrhi ; *b*, posterior extremity.
- Fig. 29. *Urolabes erythrospis*, n. sp. (marine), female, 1-20th of an inch long : *a*, anterior portion ; *b*, caudal portion ; *c*, peritoneal sheath of œsophagus ; *d*, globular dilatation and double post-œsophageal constriction of the peritoneal sheath, partly lined with the hepatic organ ; *e*, ocelli ; *f*, caudal portion of male ; *g*, penis.
- Fig. 30. *Urolabes infrequens*, n. sp. (marine), female (a little larger and longer than the foregoing) : *a*, anterior portion ; *b*, caudal portion ; *c*, peritoneal sheath of œsophagus ; *d*, post-œsophageal globular form of the peritoneal sheath ; *e*, ocelli (?) ; *f*, caudal end of male ; *g*, penis ; *h*, gland.
- Fig. 31. *Urolabes ocellata*, n. sp. (marine), female, 1-23rd of an inch long : *a*, anterior portion, the head bearing four cirrhi ; *b*, caudal portion ; *c*, ocelli ; *d*, caudal end of male ; *e*, penis.
- Fig. 32. *Urolabes barbata*, n. sp. (marine), female, 1-7th of an inch long : *a*, anterior portion, the head bearing four cirrhi ; *b*, caudal portion ; *c*, pointed, apparently exsertile end of œsophagus in buccal dilatation ; *d*, ocelli ; *e*, caudal end of male ; *f*, penis. The two globular bodies (*d*), in this as well as in fig. 30, although in situation and appearance exactly like those of figs. 29 and 31, are colourless, or only yellowish ; and therefore I can only infer that they are ophthalmic organs.

XII.—*List of Coleoptera received from Old Calabar, on the West Coast of Africa.* By ANDREW MURRAY, Edinburgh.

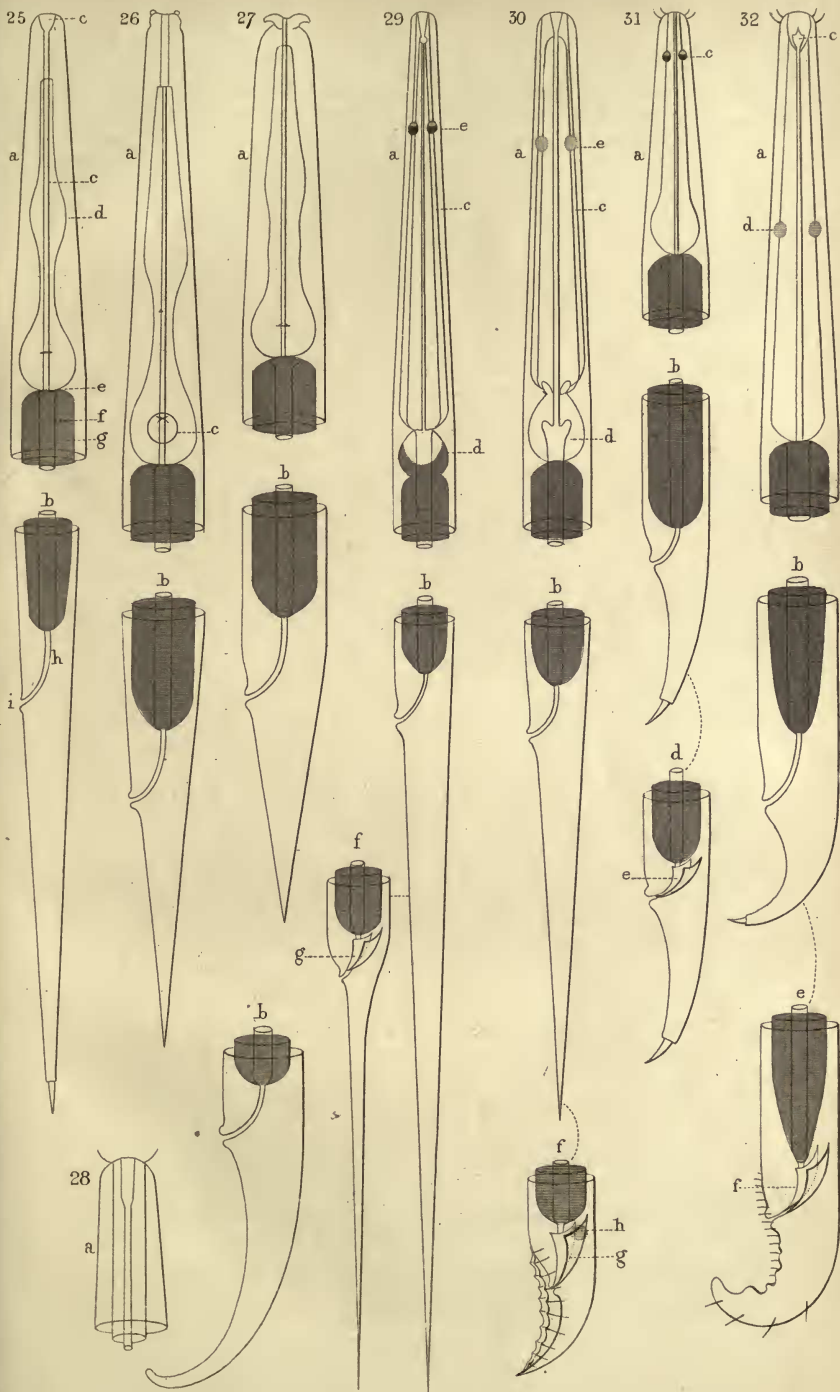
[Continued from vol. iii. p. 30.]

Feronidæ.

ANAULAX, mihi.

(From *ἀνευ* and *ἀδλαξ*, in allusion to the absence of the scutellar accessory stria on the elytra.)

Facies et forma ut in *Amara*. Caput mediocre ; oculi haud prominentes. Clypeus distinctus, brevis. Labrum transver-





sum, quadratum, integrum. Mandibulæ et maxillæ mediocres. Palpi tenues, cum articulis ultimis cylindrico-ovalibus. Mentum profunde excavatum et emarginatum, emarginatione sine dente medio, sed leviter sinuato. Ligula membranacea, sat grandis, cum paraglossis annexis, projicientibus ut cornubus leviter clavatis. Antennæ breves, capite et thorace breviores, articulis longitudine fere æqualibus, secundo excepto (sed haud multo) brevioribus; primis tribus lævibus, cæteris pubescentibus et parum dilatatis. Prothorax convexus, postice lator. Elytra thorace haud latiora, ad ejus basin conniventes, striata, sed sine stria suturali accessoria. Pedes mediocres; tibiæ anticæ dilatatæ et intus fortiter emarginatæ; tarsi tenues, triangulares, setis subtus utrinque instructi.

1. *A. iridescens*, mihi.

Niger, iridescens, nitidissimus; thorace fovea basali longitudinali lævissima utrinque instructo; elytris punctato-striatis; antennis, palpis pedibusque ferrugineis.

Long. $4\frac{1}{2}$ lin., lat. 2 lin.

Black, very polished and shining, and beautifully iridescent when looked at from before backwards with its head to the light; the iridescence rich, and with a proportion of green, yellow, and coppery red, besides blue, in it. The form is that of an *Amara*. Head impunctate; labrum, antennæ, mandibles, and parts of the mouth ferruginous. Thorax subquadrate, narrowest in front, with the anterior angles bent down; posterior angles translucent, slightly acute, with the points rounded; sides edged; an elongate triangular space within the posterior angles flattish, the remainder of the surface convex; no dorsal line; a short slender basal fovea or line containing a single row of four or five minute punctures on each side of the space opposite the scutellum. Scutellum ferruginous, smooth. Elytra truncate at the base, oval and emarginate towards the apex, pretty deeply punctate-striate, the intervals impunctate, convex; the striæ converge towards the apex and become deeper, and the interstices more convex: as already said, there is no accessory sutural stria; there are a few deep punctures on the exterior interstice. Under side more or less piceous and iridescent, impunctate. Legs testaceo-ferruginous.

I have only received one specimen of this new species. At first sight, one would take it for an *Amara*; but I am not aware of any *Amaræ* having been hitherto found further south in Africa than the Mediterranean district: besides, it is iridescent, which is also opposed to its being placed among the *Amaræ*; and on further examination, we find other differences. It has no tooth

to the mentum, which *Amara* has; it has its paraglossæ soldered to, or rather forming part of, the ligula, which is a character that, according to Lacordaire, should remove it not only from *Amara*, but from the *Feronidæ* altogether, and carry it into the *Pseudoferonidæ*. The dilatation of the anterior tibiæ, however, and the want of squamules under the tarsi, prevent us placing it with them. But there is another character which it possesses in common with a small group of the *Feronidæ* (a group with which, however, it has no other connexion), viz. the want of an accessory sutural stria,—a thing which, except in these few instances, does not occur among the *Geodephaga*. I have unfortunately only received a female, or at all events an individual which has not the anterior tarsi dilated; so that the essential characters founded on the dilatation of the tarsi of the male are unknown to me. On the whole, however, from its facies and other affinities, I would place it among the *Feronidæ*, in a position apart, but not far from the *Amara*.

Anchomenidæ.

ANCHOMENUS, Bon.

1. *A. angulaticollis*, mihi.

Elongatus, angustatus, niger; thorace angulato antice postice et lateribus, postice valde coarctato et exciso, ad basin vix capite latiore; elytris ovatis, marginatis, depressis, ad suturam parum elevatis, punctato-striatis, interstitiis sparsim distincte punctatis; antennis fuscis, ad basin ferrugineis, femoribus pallide testaceis, geniculis tibiis tarsisque piceis.

Long. $5\frac{1}{2}$ lin., lat. 2 lin.

Elongate, narrow, black. Head smooth, shining, and impunctate, with a well-marked elongate impression on each side in front at the base of the antennæ; labrum large, quadrate; mandibles, maxillæ, mentum, and palpi piceous. Antennæ fuscous; three basal joints shining ferruginous, slightly flattened, rather thicker in the middle than at either extremity. Thorax somewhat hexagonal, in front a little wider than the neck, at the base scarcely wider; the anterior margin slightly emarginate; anterior angles obtuse, slightly rounded; the lateral margin with its anterior half extending backwards and outwards nearly in a straight line to about the middle, when it turns in, forming an obtuse angle, the extremity of which is slightly rounded; it then continues obliquely inwards, making a deep excision on the posterior part of the thorax; towards the base it bends in, becoming for a short space straight, and then turning slightly outward, so that the posterior angles are rather sharper than

right angles: the base is truncate, slightly obtuse towards the angles; the lateral margin is piceous and semitransparent, deeply and broadly reflexed, and the sides edged (most so behind), forming a deep channel, which is transversely rugose; the rugosities extend along the base, more faintly in front, and still more so across the disk, which is convex and almost free from punctures; the dorsal line is deep, merging in the curvilinear impression in front, which is also well marked. Scutellum impunctate, but finely rugose. Elytra elongate-ovate, truncate at the base, emarginate and sinuate at the apex; rather depressed, but slightly raised at the suture; the lateral margins reflexed, most deeply so behind the shoulders; punctate-striate; the interstices sparsely but somewhat coarsely punctate, the marginal space with pitted impressions. Under side piceous, polished and shining, more or less rugosely punctate on the mesosternal and metasternal parapleura; faint traces of punctures on the prosternal parapleura. Thighs pale testaceous; knees, tibiae, and tarsi piceous.

A. planaticollis, mihi.

Depressus, latus, supra niger, subtus piceus; thorace lato, fere plano, hexagono; elytris punctato-striatis, interstitiis impunctatis; pedibus pallide testaceis.

Long. 6 lin., lat. $2\frac{1}{2}$ lin.

Broad, depressed, black or dark piceous. Head smooth, shining, and impunctate, with an elongated impression on each side at the base of the antennae, and traces of one or two small punctures or impressions behind these; labrum piceous, quadrate; mandibles, maxillae, mentum, palpi, and basal joints of antennae piceous; remainder of antennae fuscous, and rather thicker in the middle than at the extremities. Thorax depressed, broad, nearly hexagonal in shape, but broader than long; emarginate in front; all the angles nearly equally obtuse, and all rounded off, anterior most so: the lateral margin angled nearly in the middle, the anterior half nearly straight, the posterior slightly emarginate and waved: base obtuse towards the angles, slightly emarginate in the centre: the sides are semitranslucent and very broadly and shallowly reflexed, and nearly, though not quite, as much so in front as behind; the broad channel so formed is well defined and rugosely punctate; the anterior and basal marginal spaces are less deeply so; the disk slightly raised and smooth, but not very convex; the dorsal channel deep, reaching to the base, but not quite to the anterior margin; the sides of the reflexed margin are distinctly edged. Scutellum rugosely punctate. Elytra oblong, very flat and depressed; sides nearly parallel; base truncate, and shoulders

square; apex broadly emarginate, approaching to truncate sides only slightly reflexed: deeply punctate-striate; interstices convex and impunctate; two impressions on the third interstice, one on the exterior side of it about one-fifth from the base, and another on the interior side of it about one-third from the apex; marginal space narrow, increasing in breadth till it reaches the apical emargination, where it is broad, and bears pitted impressions. Under side piceous, polished and shining, rugosely punctate on the mesosternal and metasternal parapleuræ; the prosternal parapleuræ with very faint traces of punctures. Legs pale testaceous; knees slightly darker.

3. *A. patroboides*, mihi.

Præcedenti affinis; niger, thorace interdum subvirescente; thorace subcordato, convexo; clytris punctato-striatis; pedibus testaceis.

Long. $5\frac{1}{4}$ lin., lat. $2\frac{1}{8}$ lin.

Allied to the preceding, but smaller, and not so broad nor so depressed. Black; sometimes with a tinge of virescence in certain lights on the thorax. Head smooth, shining, and impunctate, with a deep fovea on each side in front, and an exterior narrow groove between it and the base of the antennæ; labrum quadrate, smaller than in the preceding species; mandibles and other parts of the mouth and base of the antennæ ferruginous; remainder of antennæ fuscous. Thorax subcordate, widest at the middle, with a slight tendency to the hexagonal form of that of *A. planaticollis*, but with a deeper and narrower reflexed margin; anterior margin emarginate; base truncate, oblique towards the angles, which are obtuse; the reflexed margin is narrow in front and widest at the base, and it, as well as the base, is rather finely rugose or rugoso-punctate: the disk is convex, reminding one of the thorax in *Patrobus*, impunctate; the dorsal line and arched line in front are well marked, the former reaching from the anterior margin to the base. Scutellum impunctate, almost smooth. Elytra as in *A. planaticollis*, except that the striæ are not so deep, the punctures in them less distinct, and the interstices less convex. Under side smooth and impunctate, with the exception of some faint traces of impressions on the parapleuræ or at the sides of the basal segments of the abdomen. Legs testaceous.

Colymbetidæ.

AGABUS, Leach.

1. *A. hydroporoides*, mihi.

Elongatus, oblongo-ovalis, parum depressus, nitidus, impuncta-

tus, supra brunneus, infra rufo-ferrugineus; capite toto læte ferrugineo; thorace late ad latera (interdum fere toto) pedibusque ferrugineis; elytris ad basin anguste et macula oblonga apicali ferrugineis.

Long. $2\frac{1}{2}$ lin., lat. $1\frac{1}{4}$ lin.

Elongate, oblong-oval, rounded in front and behind, depressed, shining. Head entirely clear ferruginous, smooth, and without impressions. Antennæ and palpi testaceous. Thorax brown, with broad ferruginous margins encroaching on the disk (or perhaps it may be more accurate to say—thorax ferruginous, with the anterior and posterior margins, especially towards the middle, becoming embrowned); it is rather more than twice as broad as long, broadly emarginate in front, cut nearly straight behind, being only slightly bisinuate, broader behind than in front; very slightly rounded on the sides, which have an extremely slender edging: the anterior angles projecting, and rounded at the point; posterior angles nearly right-angled: a narrow, very finely punctate impression runs along and parallel to the anterior margin, and a short, curved, similarly punctate impression lies parallel to the base on each side of the middle, commencing nearly opposite to the exterior of the scutellum. Scutellum short, broad, and ferruginous. Elytra long, depressed, brown, with a narrow ferruginous transverse band along their base, and an elongate curved ferruginous patch lying parallel to the exterior margin at the apex; they have three scarcely perceptible, interrupted, longitudinal lines of points lying more to the exterior than the suture, the middle line most interrupted, being reduced to an occasional point: the reflexed portion of the elytra at the base ferruginous. Under side ferruginous, shining, and impunctate. Legs paler, especially the four anterior.

This is, I think, the first instance of an *Agabus* having been recorded as found in Africa south of the Mediterranean district. The present species has very much the form and size of *Hydroporus memnonius*; but the five-jointed tarsi, the presence of a scutellum, and the unstriated elytra readily indicate its true position.

Gyrinidæ.

GYRETES, Brullé.

1. *G. nudivittis*, mihi.

Oblongo-rhomboideo-ovalis, dorso convexo; capite nitido æneo, lateribus subtus oculos pubescentia æneo-sericea vestitis; thorace disco nitido æneo, limbo testaceo reflexo translucente marginato, lateribus pubescentia æneo-sericea vestitis; elytris